Applicants: Yu *et al.*

Application No.: 09/333,966
Filed: June 16, 1999
For: **Death Domain Containing Receptors**

Due Date: None
Art Unit: 1646
Examiner: Ulm, J.
Docket: 1488.0310005
Atty: EKS/SGW

Wher[redacted]t stamp is placed hereon, the USPTO acknowledges receipt of the following documents:

1. Letter (*in duplicate*);
2. Fee Transmittal Form (PTO/SB/17) (*in duplicate*);
3. First Supplemental Information Disclosure Statement (*in duplicate*);
4. A listing of the cited documents on Form PTO-1449 (1 sheet);
5. Copies of the following documents: AC1, AD1, AE1, and AL2;
6. Our Check No. 29466 in the amount of $180.00 for a Submission of an Information Disclosure Statement (37 C.F.R. § 1.17(p)); and
7. One (1) return postcard.

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VIA HAND DELIVERY MARCH 7, 2003

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **YU et al.**

Application Serial No.: 09/333,966 — Art Unit: 1646

Filed: June 16, 1999 — Examiner: Ulm, J.

For: Death Domain Containing Receptors — Attorney Docket No.: **PF267D1**

SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure imposed by 37 C.F.R. § 1.56 to inform the Patent and Trademark Office of all references coming to the attention of each individual associated with the filing or prosecution of the subject application, which are or may be material to the patentability of a claim of the subject application, Attorneys for Applicants hereby direct the Examiner's attention to references AA-CE listed on the attached Form PTO/SB/08. No copies of references AA-CE are enclosed.

Copies of references AA-CE were submitted by Applicants or cited by the Examiner in connection with related U. S. Patent Application Serial No. 09/557,908, filed April 21, 2000, which claims priority under 35 U.S.C. § 120 to the instant application. Pursuant to 37 C.F.R. § 1.98(d), the Examiner is directed to the above file for copies of references AA-CE.

The above information is presented so that the Patent and Trademark Office can determine any materiality thereof to the claimed invention. See 37 CFR §§ 1.104(a) concerning the PTO duty to consider and use any such information. It is respectfully requested that the information be considered during the prosecution of this application.

Identification of the listed reference(s) is not to be construed as an admission of any individual associated with the filing or prosecution of the subject application that such references are available as "prior art" against the subject application. Furthermore,

Applicants do not waive any rights to appropriate action to establish patentability over any of the listed documents should they be applied as references against the claims of the subject application.

Applicants respectfully request that the Examiner review the listed references and that the references be made of record in the file history of the application.

Pursuant to 37 C.F.R. § 1.97(b), since this information disclosure statement is being filed before the mailing date of a first Office Action on the merits, no fee is due in connection herewith. However, should the Patent Office determine otherwise, please charge the required fee to Human Genome Sciences, Inc., deposit account no. 08-3425.

Respectfully submitted,

Dated: March 7, 2003

Lin J. Hymel (Reg. No. 45,414)
Attorney for Applicants

Human Genome Sciences, Inc.
9410 Key West Avenue
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(301) 251-6015 (phone)

Enclosure
KKH/LJH/BM/lcc

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 4

Complete if Known	
Application Number	09/333,966
Filing Date	June 16, 1999
First Named Inventor	Guo-Liang Yu
Art Unit	1646
Examiner Name	J. Ulm
Attorney Docket Number	PF267D1

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No [1]	Document Number: Number-Kind Code [2] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	5,349,052	09/20/1994	Delgado et al.	
	AB	5,478,925	12/26/1995	Wallach et al.	
	AC	5,643,575	07/01/1997	Martinez et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No [1]	Foreign Patent Document: Country Code [3]-Number [4]-Kind Code [5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T [6]
	AD	WO 95/06058	03/02/1995	Royal Free Hospital School of Medicine		
	AE	WO 95/10540	04/20/1995	Immunex Corporation		
	AF	EP 0 401 384 B1	12/12/1990	Kirin–Amgen, Inc.		
	AG	WO 96/14328	05/17/1996	Human Genome Sciences, Inc.		
	AH	WO 96/26736	09/06/1996	Ludwig Institute for Cancer Research and Helsinki Univ. Licensing Ltd., Oy		
	AI	WO 96/34095	10/31/1996	Human Genome Sciences, Inc.		
	AJ	WO 96/39515	12/12/1996	Human Genome Sciences, Inc.		
	AK	WO 97/33899	09/18/1997	Human Genome Sciences, Inc.		
	AL	WO 97/34911	09/25/1997	Human Genome Sciences, Inc.		
	AM	WO 98/02543	01/22/1998	Chugai Research Institute for Molecular Medicine, Inc.		
	AN	WO 98/06842	02/19/1988	Schering Corporation		
	AO	WO 98/07832	02/26/1998	Ludwig Institute for Cancer Research and Helsinki Univ. Liccensing Ltd., Oy		
	AP	WO 98/07880	02/26/1998	Human Genome Sciences, Inc.		
	AQ	WO 98/14565	04/09/1998	Immunex Corporation		
	AR	WO 98/18921	05/07/1998	Human Genome Sciences, Inc.		
	AS	WO 98/30693	07/16/1998	Human Genome Sciences, Inc.		
	AT	WO 98/30694	07/16/1998	Human Genome Sciences, Inc.		
	AU	WO 98/32466	07/30/1998	Polymasc Pharmaceuticals PLC		
	AV	WO 98/41629	09/24/1998	Human Genome Sciences, Inc.		
	AW	WO 98/49305	11/05/1998	Amgen, Inc.		
	AX	WO 98/56892	12/17/1998	Human Genome Sciences, Inc.		
	AY	EP 0 506 477 B1	09/30/1992	Merck & Co., Inc.		
	AZ	WO 00/08139	02/17/2000	Human Genome Sciences, Inc.		
	BA	CA 2,260,754	01/22/1998	Chugai Research Institute for Molecular Medicine, Inc.		

*EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] Applicant's unique citation designation number (optional). [2] See attached Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 4

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Application Number	09/333,966
Filing Date	June 16, 1999
First Named Inventor	Guo-Liang Yu
Art Unit	1646
Examiner Name	J. Ulm
Attorney Docket Number	PF267D1

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published	T[2]
	BB	Arend et al. "Binding of Il-1α, IL-1β, and IL-1 Receptor Antagonist by Soluble IL-1 Receptors and Lveles of Soluble IL-1 Receptors in Synovial Fluids," J. Immunol. 153:4766-4774 (1994)	
	BC	Ashkenazi, A. *et al.*, "Protection against endotoxic shock by a tumor necrosis factor receptor immunoadhesin," *Proc. Natl. Acad. Sci. USA 88*:10535-10539 (1991)	
	BD	Beutler, B., and Cerami, A., "Tumor Necrosis, Cachexia, Shock, and Inflammation: A Common Mediator," *Ann. Rev. Biochem. 57*:505-518 (1988)	
	BE	Boldin, M.P. *et al.*, "A Novel Protein That Interacts with the Death Domain of Fas/APO1 Contains a Sequence Motif Related to the Death Domain," *J. Biol. Chem. 270*:7795-7798 (April 1995)	
	BF	Boldin, M.P. *et al.*, "Involvement of MACH, a Novel MORT1/FADD-Interacting Protease, in Fas/APO-1- and TNF Receptor-Induced Cell Death," *Cell 85*:803-815 (June 1996)	
	BG	Caliceti, P., *et al.*, "Biopharmaceutical Properties of Uricase Conjugated to Neutral and Amphiphilic Polymers," *Bioconjugate Chem. 10*:638-646 (August 1999)	
	BH	Chinnaiyan, A.M. *et al.*, "FADD, a Novel Death Domain-Containing Protein, Interacts with the Death Domain of Fas and Initiates Apoptosis," *Cell 81*:505-512 (May 1995)	
	BI	Chinnaiyan, A.M. *et al.*, "FADD/MORT1 Is a Common Mediator of CD95 (Fas/APO-1) and Tumor Necrosis Factor Receptor-induced Apoptosis," *J. Biol. Chem. 271*:4961-4965 (March 1996)	
	BJ	Corti, A. *et al.*, "Identification of an Epitope of Tumor Necrosis Factor (TNF)-Receptor Type 1 (p55) Recognized by a TNF-α-Antagonist Monoclonal Antibody," *Lymphokine Cytokine Res. 13*:183-190 (June 1994)	
	BK	Delgado, C., *et al.*, "The Uses and Properties of PEG-Linked Proteins," *Clin. Rev. Ther. Drug Carrier Systems 9*:249-304 (1992)	
	BL	Deng, B., *et al.*, "An Agonist Murine Monoclonal Antibody to the Human c-Mpl Receptor Stimulates Megakaryocytopoiesis," *Blood 92*:1981-1988 (September 1998)	
	BM	Fiers, W., "Tumor necrosis factor," *FEBS Lett. 285*:199-212 (1991)	
	BN	Francis, G.E. *et al.*, "PEGylation of cytokines and other therapeutic proteins and peptides: the importance of biological optimisation of coupling techniques," . *Intl. J. Hematol. 68*:1-18 (July 1998)	

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Sheet 3 of 4

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Application Number	09/333,966
Filing Date	June 16, 1999
First Named Inventor	Guo-Liang Yu
Art Unit	1646
Examiner Name	J. Ulm
Attorney Docket Number	PF267D1

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	BO	Fu, M.L.X. *et al.*, "Characterization of anti-peptide antibodies directed against an extracellular immunogenic epitope on the human α_1-adrenergic receptor," *Clin. Exp. Immunol. 97*:146-151 (July 1994)	
	BP	Goeddel, D.V. *et al.*, "Tumor Necrosis Factors: Gene Structure and Biological Activities," *Cold Spring Harbor Symp. Quant. Biol. LI*:597-609 (1986)	
	BQ	Hahne, M., *et al.*, "APRIL, a New Ligand of the Tumor Necrosis Factor Family, Stimulates Tumor Cell Growth," *J. Exp. Med. 188*:1185-1190 (September 1998)	
	BR	Hsu, H. *et al.*, "The TNF Receptor 1-Associated Protein TRADD Signals Cell Death and NF-κB Activation," *Cell 81*:495-504 (May 1995)	
	BS	Hsu, H. *et al.*, "TRADD-TRAF2 and TRADD-FADD Interactions Define Two Distinct TNF Receptor 1 Signal Transduction Pathways," *Cell 84*:299-308 (January 1996)	
	BT	Hsu, H. *et al.*, "TNF-Dependent Recruitment of the Protein Kinase RIP to the TNF Receptor-1 Signaling Complex," *Immunity 4*:387-396 (April 1996)	
	BU	Hughes, D.P.M. and Crispe, I.N., "A Naturally Occurring Soluble Isoform of Murine Fas Generated by Alternative Splicing," *J. Exp. Med. 182*:1395-1401 (November 1995)	
	BV	Kischkel, F.C. *et al.*, "Cytotoxicity-dependent APO-1 (Fas/CD95)-associated proteins form a death-inducing signaling complex (DISC) with the receptor," *EMBO 14*:5579-5588 (November 1995)	
	BW	Malik, F., *et al.*, "Polyethylene Glycol (PEG)-modified Granulocyte-Macrophage Colony-stimulating Factor (GM-CSF) with Conserved Biological Activity," *Exp. Hematol. 20*:1028-1035 (1992)	
	BX	Morpurgo, M., *et al.*, "Covalent Modification of Mushroom Tyrosinase with Different Amphiphic Polymers for Pharmaceutical and Biocatalysis Applications," *App. Biochem. Biotech. 56*:59-72 (January 1996)	
	BY	Old, L.J., "Tumor Necrosis Factor," *Scientific American 258*:59-75 (1988)	
	BZ	Rothe, M. *et al.*, "TRAF2-Mediated Activation of NF-κB by TNF Receptor 2 and CD40," *Science 269*:1424-1427 (September 1995)	
	CA	Stanger, B.Z. *et al.*, "RIP: A Novel Protein Containing a Death Domain That Interacts with Fas/APO-1 (CD95) in Yeast and Causes Cell Death," *Cell 81*:513-23 (May 1995)	

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Sheet 4 of 4

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First Named Inventor	Guo-Liang Yu
Art Unit	1646
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	CB	Tartaglia, L. A., *et al.*, "Tumor Necrosis Factor's Cytotoxic Activity is Signaled by the p55 TNF Receptor," *Cell 73*:213-216 (1993)	
	CC	Tewari, M. and Dixit, V.M., "Fas- and Tumor Necrosis Factor-induced Apoptosis Is Inhibited by the Poxvirus *crmA* Gene Product," *J. Biol. Chem. 270*:3255-3260 (February 1995)	
	CD	Vorobjev, P. E., *et al.*, "Oligonucleotide Conjugated to Linear and Branched High Molecular Weight Polyethylene Glycol as Substrates for RNase H.," *Nucleosides & Nucleotides 18*:2745-2750 (November-December 1999)	
	CE	Yoon, S.T. *et al.*, "Both High and Low Avidity Antibodies to the T Cell Receptor Can Have Agonist or Antagonist Activity," *Immunity 1*:563-569 (October 1994)	

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